## INTERNATIONAL SEARCH REPORT

PCT/GB2004/004176

| ### CALCULATION OF SULPIECT MATTER ### DEC 7 B26C 7/2 B26C 7/2 B26C 7/4 F16.012/08 F16.013/24  ### According to International Patient Classification (IPC) or to both national classification and IPC  #### F16.013 F26C F801 F B65 F16.0  ### DEC 7 B26C F801 F B65 F16.0  ### DEC 801 F B65 F16.0  ### |   |  |  |                  |   |  | 701/4   | DE0047   | 004170  |
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| BECHONIC data base concluded during the International search (name of data base and, where practical, search terms used)  Electronic data base concluded during the International search (name of data base and, where practical, search terms used)  Electronic data base concluded during the International search (name of data base and, where practical, search terms used)  Electronic data base concluded during the International search (name of data base and, where practical, search terms used)  Electronic data base concluded during the International search (name of data base and, where practical, search terms used)  Electronic data base concluded during the International search (name of data base and, where practical, search terms used)  Electronic data base concluded during the International search (name of data base and, where practical, search terms used)  Electronic data base concluded during the International search (name of data base and, where practical, search terms used)  Electronic data base concluded during the International search (name of data base and, where practical, search terms used)  Electronic data base concluded during the International search (name of data base and, where practical, search terms used)  Electronic data base concluded during the International search (name of data base and, where practical, search terms used)  Electronic data base concluded during the International (name of data base and, where practical, search terms used)  Electronic data base concluded and the International search (name of data base and, where practical, search terms used)  Electronic data base concluded and the International search (name of data base and, where practical, search terms used)  Electronic data base of data data data data data data data dat  | CLASSIFIC 7   | B50(3) 15 p500   |  |                  | В   | )1F15/   | 02  | B01F13   | /04   |
| A PELDS SEARCHED   | according to 1  | nternational Patent Classification (II   | C) or to both nationa  | l classification | and IPC   |  |   |  |   |
| A   Discussed documents are listed to the continuation of box C.   Patent family members are listed in annex.  |   |  |  |                  |   |  |   |  |   |
| Electronic data base conculted during the International search (name of data base and, where practical, search terms used)  EPO-Internal, WPI Data, PAJ  Citation of document, with indication, where appropriate, of the relevant passages  Relevant to claim No.  X  | Ainimum doc<br>IPC 7  | umentation searched (classification<br>B28C B01F B65D  | 1,100  |                  |   |  |   |  |   |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages  X   | Ocumentation  |  | cumentation to the ex  | tent that such   | documer   | ts are inclu   | ided in the t   | fields search  | ned   |
| Concluments considered to see relevant  Category** Citation of document, with indication, where appropriate, of the relevant passages  X US 2003/010792 A1 (JOHNSON KENNETH A ET AL) 16 January 2003 (2003-01-16)  Y paragraph [0002]     paragraph [00037] - paragraph [0044]     paragraph [0058] - paragraph [0060]     A figures 3,6,6,10,11A,11B,12  Y US 6 354 726 B2 (FDERSTER WERNER)     12 March 2002 (2002-03-12)  A column 1, paragraph 7 - paragraph 9     column 8, line 48 - column 9, line 18     claim 1 figure 1  X Pettent family members are listed in americant liting data to conditional data of another order of considered moved or cannot be considered in the profession data of another order speal resum (see species)  Yo document which may throw doubts on priority distington data of another order of control paragraph is an oral disclosure, use, exhibition or control paragraph is an oral disclosure, use, exhibition or procument implication of order speal resum (see species)  Yo document referring is an oral disclosure, use, exhibition or procument upublished of in the profession data of another procument in the priority data data or the cart which is not considered in word or cannot be considered invention cannot be considered in word or cannot be considered invention cannot be considered invention cannot be considered invention to be considered invention cannot be considered  | -1 -1- do   | has consulted during the intern  | ational search (name   | of data base a   | ind, when                                       | e practical  | , search terr   | ns used)   | ·   |
| Category   |   |  |  |                  |   | •  |   |  |   |
| X  | C. DOCUME   | NTS CONSIDERED TO BE RELE  | IANT   |                  | ·   |  |   |  | Relevant to daim No.  |
| X   US 2083/01/92 AT (Johnson Telephone)   12  |   | Citation of document, with indicati  | on, where appropriat   | e, of the releva | int passa                                       | jes<br>  |   |  | Relevant to dam No.   |
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| A column 1, paragraph 7 - paragraph 9  column 8, line 48 - column 9, line 18  claim 1 figure 1  Further documents are listed in the continuation of box C.    Year   Further documents   Year   |   |  |  |                  |   |  |   |  | 12  |
| Further documents are listed in the continuation of box C.  * Special categories of cited documents:  *A* document defining the general state of the art which is not considered to be of particular relevance  *E* earlier document but published on or after the international fling date or priority date and not in conflict with the application but clied to understand the principle or theory underlying the invention filling date or priority date and not in conflict with the application but clied to understand the principle or theory underlying the invention of the international date of another or which is cited to establish the publication date of another clied no or other means  *P* document referring to an oral disclosure, use, exhibition or other means  *P* document published prior to the international fliing date but later than the priority date datened  Date of the actual completion of the international search  19 January 2005  Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentkan 2  **X* Determine the international fliing date or priority date and not in conflict with the application but clied to understand the principle or theory underlying the international fliing date or priority date and not in conflict with the application but clied to understand the principle or theory underlying the international fliing date or priority date and not in conflict with the application but clied to understand the principle or theory underlying the invention.  **X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the priority date date and not in conflict with the application but clied to understand the principle or theory underlying the invention cannot be considered novel or cannot be considered to involve an inventive step when the document is combined with one or more other such as a pers |   | 12 March 2002 ( column 1, parag column 8, line claim 1   | 2002-03-12)<br>raph 7 - na   | ragraph          | 9<br>e 18                                       |  |   |  | 1-11  |
| *Special categories of cited documents:  *A" document defining the general state of the art which is not considered to be of particular relevance  *A" document but published on or after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  *E" earlier document but published on or after the international filing date  *L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  *O" document referring to an oral disclosure, use, exhibition or other means  *P" document published prior to the international filing date but later than the priority date claimed  *Date of the actual completion of the international search  *Q" document member of the same patent family  *Date of mailing address of the ISA  *European Patent Office, P.B. 5818 Patentlaan 2*  *Authorized officer   |   |  |  | , <u>s.</u> , v= | /   |  |   |  |   |
| *Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier document but published on or after the international filing date  "I" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means  "P" document published prior to the international filing date but later than the priority date claimed  Date of the actual completion of the international search  19 January 2005  Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  *T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone cannot be considered novel or cannot be considered to involve an inventive step when the document be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.  "a" document member of the same patent family  Date of mailing of the international search report  2.2. 04, 2005   |   | thes documents are listed in the CO  | ntinuation of box C.   |                  | X   | Patent fam   | ily members   | are listed in  | annex.  |
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| A TOTAL TO ALCOHOL TV 31 651 600 DI. LANCELLA LANCELLA K   | Name an   | d mailing address of the ISA  European Patent Office, P.   |  |                  | Aut   |  |   | wa D   |   |
| Fax: (+31-70) 340-3016   |   | Tel (+31-70) 340-2040, TX  | . 31 651 <b>epo</b> ni.  |                  |   | кеаі   | Lapre   | ia, K  |   |

## INTERNATIONAL SEARCH REPORT

International application No. PCT/GB2004/004176

| Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)   |
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| This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:   |
| Claims Nos.:     because they relate to subject matter not required to be searched by this Authority, namely:  |
| Claims Nos.:     because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: |
| 3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).  |
| Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)   |
| This international Searching Authority found multiple inventions in this international application, as follows:  |
| see additional sheet   |
| As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims  |
| 2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  |
| 3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:                        |
| No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  1-12         |
| Remark on Protest  The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.  |

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-12

Mixing apparatus with single pneumatic source to charge and discharge the vessel

2. claims: 13-15

Spherical mixing vessel

| International Application No |  |
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|           | tion) DOCUMENTS CONSIDERED TO BE RELEVANT  Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
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|           | US 5 908 240 A (HOOD MAX GEORGE) 1 June 1999 (1999-06-01) column 1, line 4 - line 6 column 2, line 1 - line 17 column 2, line 65 - column 3, line 6; figures 1,2   | 1-12                  |
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information on patent family members

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